



Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON K6A 1K7 Canada
Tel (613) 632-5200
Fax 613 632-5246

Purchasing Receipts

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name	
PO041355	MCM001-VU	1	1	2% 10 Net 30	1328T68	440C SS Rod, 5/8" dia.				8	10/16/2018	8		S118781	Stock	10/16/2018	\$ 84.13 / ft	0		\$673.00	McMaster-Carr Supply Co,	
		2			MT-NYLON 6-R0.500-W	Nylon 6 Round Bar 0.500" Dia.				5				S118782	Stock	10/16/2018	\$ 1.05 / ft	0		\$5.25	McMaster-Carr Supply Co,	
		3			MT-NYLON 6-B1.000X1.000	Off-White Nylon Bar, 1" Wide, 1" Thick				4				S118783	Stock	10/16/2018	\$ 12.29 / ft	0		\$49.16	McMaster-Carr Supply Co,	
Total:										17			17								\$727.41	

Plex 10/16/2018 1:05 PM dart.Tollis.Andrew



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041355**

Supplier: MCM001-VU
McMaster-Carr Supply Co,
P.O. Box 7690
Chicago, IL 60680-7690 USA
Phone: 330 995 5500
Fax: 330 995 9600

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO041355

PO Date: 10/15/18

Due Date: 10/16/18

Purchase Order
Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

Via: Ground

Pymt Terms: 2% 10 Net 30

Freight Terms:

Special Comments:

E-MAILED
OCT 15 2018

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1		1328T68	2 ft long	440C SS Rod, 5/8" dia.	Firmed	-	10/16/18	8 ft	8 ft	8 ft	\$84.125/ft	\$673.00
2		MT-NYLON 6-R0.500-W	8538K18 5/FT	Nylon 6 Round Bar 0.500" Dia.	Firmed	-	10/16/18	5 ft	5 ft	5 ft	\$1.05/ft	\$5.25
3		MT-NYLON 6-B1.000X1.000	8733K64	Off-White Nylon Bar, 1" Wide, 1" Thick	Firmed	-	10/16/18	4 ft	4 ft	4 ft	\$12.29/ft	\$49.16
											Grand Total:	\$727.41

Order Notes

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A016 PERSONNEL QUALIFICATION

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A032 DOCUMENT SPECIAL REQUIREMENTS

A033 STATEMENT OF CONFORMITY/TEST RECORDS FOR NAS, AN and MS FASTENERS

A040 NOTIFICATION OF QUALITY ESCAPE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENTS

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 10/15/18 2:00 PM dart.lavoie.chantal



200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO041355

Order Placed By
Chantal Lavoie

McMaster-Carr Number
2626919-01

Page 1 of 1

10/15/2018

Line	Product	Ordered	Shipped
1	1328T68 Hardened 440C Stainless Steel Rod, 5/8" Diameter, 2 Feet Long	4 Each	2

Shipped separately from our Cleveland warehouse on 10/15

1	1328T68 Hardened 440C Stainless Steel Rod, 5/8" Diameter, 2 Feet Long	4 Each	2
2	8538K18 Off-White Nylon Rod, 1/2" Diameter, 5 Feet Long	5 Feet	5
3	8733K64 Off-White Nylon Bar, 1" Wide, 1" Thick, 4' Length	4 Feet	4



200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO041355

Order Placed By
Chantal Lavoie

McMaster-Carr Number
2626919-02

Page 1 of 1

10/15/2018

Line	Product	Ordered	Shipped
2	8538K18 Off-White Nylon Rod, 1/2" Diameter, 5 Feet Long	5 Feet	5
3	8733K64 Off-White Nylon Bar, 1" Wide, 1" Thick, 4' Length	4 Feet	4

Shipped separately from our Chicago warehouse on 10/15

1	1328T68 Hardened 440C Stainless Steel Rod, 5/8" Diameter, 2 Feet Long	4 Each	2
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200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO041355

Order Placed By
Chantal Lavoie

McMaster-Carr Number
2626919-03

Page 1 of 1

10/15/2018

Line	Product	Ordered	Shipped
1	1328T68 Hardened 440C Stainless Steel Rod, 5/8" Diameter, 2 Feet Long	4 Each	2

Shipped separately from our Chicago warehouse on 10/15

1	1328T68 Hardened 440C Stainless Steel Rod, 5/8" Diameter, 2 Feet Long	4 Each	2
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Hardened 440C Stainless Steel Rod

5/8" Diameter

1328T68



Material	440C Stainless Steel
Cross Section Shape	Round
Construction	Solid
Appearance	Plain
Diameter	5/8"
Diameter Tolerance	-0.0002" to 0"
Tolerance Rating	Tight, Undersized
Yield Strength	275,000 psi
Mechanical Finish	Precision Ground
Temper Rating	Hardened
Hardness	Rockwell C55
Hardness Rating	Very Hard
Min. Temperature	Not Rated
Maximum Temperature	800° F
Specifications Met	AMS 5630, ASTM A276
Straightness Tolerance	0.006" per ft.
Magnetic Properties	Magnetic
Density	0.28 lbs./cu. in.
Material Composition	
Iron	76.73-82.65%
Carbon	0.95-1.2%
Chromium	16-18%
Copper	0-0.5%
Manganese	0-1%
Molybdenum	0.4-0.75%
Nickel	0-0.75%
Phosphorus	0-0.04%
Silicon	0-1%
Sulfur	0-0.03%
Length Tolerance	-1/4" to 1/4"
Length	1/2 ft., 1 ft., 2 ft.
RoHS	Compliant

These rods are hardened for superior strength and wear resistance. One of the hardest types of stainless steel after heat treating, 440C offers excellent wear and abrasion resistance. It's often used for bearings, valves, and knife blades. This material maintains its corrosion resistance in temperatures up to 800° F.

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: 1328768
DATE: 18/10/16

PO / BATCH NO.: P0041355/S118781

MATERIAL CERT REC'D: Yes
QUANTITY RECEIVED: 8 ft
QUANTITY INSPECTED: 8 ft
QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.625"
THICKNESS RECEIVED: 0.625"
SHEET SIZE ORDERED: —
SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	Y	N	440L Stainless Steel
CORRECT THICKNESS	(Y)	N	
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	(Y)	N	P0041355
CORRECT MATERIAL IDENTIFICATION	(Y)	N	
CORRECT M# ON THE MATERIAL	(Y)	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>AT</u>		SIGNED OFF BY: _____	
DATE: <u>18/10/16</u>		DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

Off-White Nylon Rod 1/2" Diameter, 5 Feet Long

\$1.05 per ft. of 5
8538K18



Material	Nylon Plastic
Grade	6/6
Cross Section Shape	Round
Construction	Solid
Texture	Smooth
Color	Off-White
Clarity	Opaque
Diameter	1/2"
Diameter Tolerance	0" to +0.005"
Tolerance Rating	Oversized
Length	5 ft.
Hardness	Rockwell R110
Hardness Rating	Hard
For Use Outdoors	No
Minimum Temperature	Not Rated
Maximum Temperature	185° F
Impact Strength	1.00 ft.-lbs./in.
Impact Strength Rating	Good
Tensile Strength	11,200 psi
Tensile Strength Rating	Excellent
Specifications Met	ASTM D5989, ASTM D6779, Made of FDA Listed Material, NSF/ANSI Standard 61 for Drinking Water, UL 94V2
Density	0.041 lbs./cu. in.
Coefficient of Friction	0.27
Dielectric Strength	300V/mil
Water Absorption	1.35%
Coefficient of Thermal Expansion	4.8×10^{-5} in./in./°F

1328 T68 x

MT-Nylon 6

RoHS

Compliant

Often used for bearings, gears, cams, and valve seats. These nylon 6/6 rods stand up to wear and abrasion, as well as gasoline, mineral oil, and refrigerants.

PURCHASE MATERIAL :
SPECIFICATION: NYLON 6 ROUND BAR
ASTM D5989
PART NUMBER: MT-NYLON 6-RD.DDD]-C
WHERE "D.DDD" = DIAMETER IN INCHES
WHERE C = COLOR [W= WHITE] / [B= BLACK]
EG. 5/8" ROUND BAR = MT-NYLON 6-RD.625-W

TITLE		NYLON 6 ROUND BAR		ART DRAWING		A	
DATE		REV		DATE		REV	
VAL 8/9/2017		T001		S05		FACILITIES	
VAL 08/11/2017		S06		S07		ADDRESSES	
SAC 08/11/2017		S08		S09		SURFACES	
MFG 08/11/2017		S10		S11		UNIT SPECIFICATIONS	
VAL 08/05/2017		S12		S13		1. MATERIALS	
MFG 08/05/2017		S14		S15		2. INTERFERENCE	
VAL 08/05/2017		S16		S17		3. PERSONAL LIMITS	
MFG 08/05/2017		S18		S19		4. PERSONAL LIMITS	
VAL 8/31/2017		S20		S21		5. PERSONAL LIMITS	
MFG 8/31/2017		S22		S23		6. PERSONAL LIMITS	
VAL 8/31/2017		S24		S25		7. PERSONAL LIMITS	
MFG 8/31/2017		S26		S27		8. PERSONAL LIMITS	
VAL 8/31/2017		S28		S29		9. PERSONAL LIMITS	
MFG 8/31/2017		S30		S31		10. PERSONAL LIMITS	
VAL 8/31/2017		S32		S33		11. PERSONAL LIMITS	
MFG 8/31/2017		S34		S35		12. PERSONAL LIMITS	
VAL 8/31/2017		S36		S37		13. PERSONAL LIMITS	
MFG 8/31/2017		S38		S39		14. PERSONAL LIMITS	
VAL 8/31/2017		S40		S41		15. PERSONAL LIMITS	
MFG 8/31/2017		S42		S43		16. PERSONAL LIMITS	
VAL 8/31/2017		S44		S45		17. PERSONAL LIMITS	
MFG 8/31/2017		S46		S47		18. PERSONAL LIMITS	
VAL 8/31/2017		S48		S49		19. PERSONAL LIMITS	
MFG 8/31/2017		S50		S51		20. PERSONAL LIMITS	
VAL 8/31/2017		S52		S53		21. PERSONAL LIMITS	
MFG 8/31/2017		S54		S55		22. PERSONAL LIMITS	
VAL 8/31/2017		S56		S57		23. PERSONAL LIMITS	
MFG 8/31/2017		S58		S59		24. PERSONAL LIMITS	
VAL 8/31/2017		S60		S61		25. PERSONAL LIMITS	
MFG 8/31/2017		S62		S63		26. PERSONAL LIMITS	
VAL 8/31/2017		S64		S65		27. PERSONAL LIMITS	
MFG 8/31/2017		S66		S67		28. PERSONAL LIMITS	
VAL 8/31/2017		S68		S69		29. PERSONAL LIMITS	
MFG 8/31/2017		S70		S71		30. PERSONAL LIMITS	
VAL 8/31/2017		S72		S73		31. PERSONAL LIMITS	
MFG 8/31/2017		S74		S75		32. PERSONAL LIMITS	
VAL 8/31/2017		S76		S77		33. PERSONAL LIMITS	
MFG 8/31/2017		S78		S79		34. PERSONAL LIMITS	
VAL 8/31/2017		S80		S81		35. PERSONAL LIMITS	
MFG 8/31/2017		S82		S83		36. PERSONAL LIMITS	
VAL 8/31/2017		S84		S85		37. PERSONAL LIMITS	
MFG 8/31/2017		S86		S87		38. PERSONAL LIMITS	
VAL 8/31/2017		S88		S89		39. PERSONAL LIMITS	
MFG 8/31/2017		S90		S91		40. PERSONAL LIMITS	
VAL 8/31/2017		S92		S93		41. PERSONAL LIMITS	
MFG 8/31/2017		S94		S95		42. PERSONAL LIMITS	
VAL 8/31/2017		S96		S97		43. PERSONAL LIMITS	
MFG 8/31/2017		S98		S99		44. PERSONAL LIMITS	
VAL 8/31/2017		S100		S101		45. PERSONAL LIMITS	
MFG 8/31/2017		S102		S103		46. PERSONAL LIMITS	
VAL 8/31/2017		S104		S105		47. PERSONAL LIMITS	
MFG 8/31/2017		S106		S107		48. PERSONAL LIMITS	
VAL 8/31/2017		S108		S109		49. PERSONAL LIMITS	
MFG 8/31/2017		S110		S111		50. PERSONAL LIMITS	
VAL 8/31/2017		S112		S113		51. PERSONAL LIMITS	
MFG 8/31/2017		S114		S115		52. PERSONAL LIMITS	
VAL 8/31/2017		S116		S117		53. PERSONAL LIMITS	
MFG 8/31/2017		S118		S119		54. PERSONAL LIMITS	
VAL 8/31/2017		S120		S121		55. PERSONAL LIMITS	

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-NYLON 6-R0.500-W
 DATE: 18/10/16

PO / BATCH NO.: P0041355/5 118782

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 54
 QUANTITY INSPECTED: 54
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.500"
 THICKNESS RECEIVED: 0.500"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	(Y)	N	ASTM D5989
CORRECT THICKNESS	(Y)	N	
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	(Y)	N	P0041355
CORRECT MATERIAL IDENTIFICATION	(Y)	N	
CORRECT M# ON THE MATERIAL	(Y)	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/10/16</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

McMASTER-CARR®

Off-White Nylon Bar

1" Wide, 1" Thick

In stock
\$12.29 per ft.
8733K64



Material	Nylon Plastic
Grade	6/6
Cross Section Shape	Rectangle
Construction	Solid
Texture	Smooth
Color	Off-White
Clarity	Opaque
Thickness	1"
Thickness Tolerance	0.000" to +0.025"
Tolerance Rating	Oversized
Width	1"
Width Tolerance	-0.010" to +1/8"
Length	1 ft., 2 ft., 3 ft., 4 ft
Backing Type	Plain
Hardness	Rockwell R110
Hardness Rating	Hard
For Use Outdoors	No
Minimum Temperature	Not Rated
Maximum Temperature	210° F
Impact Strength	0.60 ft.-lbs./in.
Impact Strength Rating	Poor
Tensile Strength	11,200 psi
Tensile Strength Rating	Excellent
Specifications Met	3-A Certified, ASTM D5989, ASTM D6779.

	NSF/ANSI Standard 61 for Drinking Water, UL 94V2
Density	0.041 lbs./cu. in.
Coefficient of Friction	0.27
Dielectric Strength	300V/mil
Water Absorption	1.35%
Coefficient of Thermal Expansion	4.8×10^{-5} in./in./°F
RoHS	Compliant

With excellent wear and abrasion resistance, these nylon 6/6 sheets, bars, and strips are often used for bearings, gears, and other high-wear parts. They resist gasoline, mineral oil, and refrigerants.

REV.	DESCRIPTION	DATE	BY	APPROVED
A	NEW ISSUE	17.08.23	VM	VM

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL:

SPECIFICATION:

PART NUMBER:

NYLON 6 BAR

ASTM D5988

MT-NYLON 6-B[H.HH]x[W.WWW]-C

WHERE "H.HH" = HEIGHT IN INCHES

WHERE "W.WWW" = WIDTH IN INCHES

WHERE "C" = COLOR [W= WHITE] / [B= BLACK]

EG. 1/4" x 2" WHITE BAR = MT-NYLON 6-B0.250x2.000-W

TOLERANCES PER MANUFACTURER SPECIFICATIONS

DART AEROSPACE		NYLON 6 BAR	
DESIGN BY: VM 8/9/2017		REV: A	
CHECKED BY: SAC 09/01/2017		DATE: 17.08.23	
APPROVED BY: PD 09/01/2017		BY: VM	
DATE: 9/1/2017		SCALE: NTS	
SHEET 1 OF 1		COPYRIGHT © 2017 BY DART AEROSPACE LTD.	

KLW 17-649

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-NYLON 6-BL.000x1.000

PO / BATCH NO.: P0041355/5118783

DATE: 10/10/16

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 1.000"

QUANTITY RECEIVED: 4Lr

THICKNESS RECEIVED: 1.000"

QUANTITY INSPECTED: 4Lr

SHEET SIZE ORDERED: -

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	(Y)	N	ASM D5489
CORRECT THICKNESS	(Y)	N	
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	(Y)	N	P0041355
CORRECT MATERIAL IDENTIFICATION	(Y)	N	
CORRECT M# ON THE MATERIAL	(Y)	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>10/10/16</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in